```
BBBBBBBBBBBB        AAAAAAAAA        SSSSSSSSSSS  RRRRRRRRRRR     TTTTTTTTTTTTTTT  LLL
BBBBBBBBBBBB        AAAAAAAAA        SSSSSSSSSSS  RRRRRRRRRRR     TTTTTTTTTTTTTTT  LLL
BBBBBBBBBBBB        AAAAAAAAA        SSSSSSSSSSS  RRRRRRRRRRR     TTTTTTTTTTTTTTT  LLL
BBB          BBB   AAA       AAA   SSS           RRR         RRR       TTT        LLL
BBB          BBB   AAA       AAA   SSS           RRR         RRR       TTT        LLL
BBB          BBB   AAA       AAA   SSS           RRR         RRR       TTT        LLL
BBB          BBB   AAA       AAA   SSS           RRR         RRR       TTT        LLL
BBB          BBB   AAA       AAA   SSS           RRR         RRR       TTT        LLL
BBB          BBB   AAA       AAA   SSS           RRR         RRR       TTT        LLL
BBBBBBBBBBBB       AAA       AAA     SSSSSSSSS   RRRRRRRRRRR           TTT        LLL
BBBBBBBBBBBB       AAA       AAA     SSSSSSSSS   RRRRRRRRRRR           TTT        LLL
BBBBBBBBBBBB       AAA       AAA     SSSSSSSSS   RRRRRRRRRRR           TTT        LLL
BBB          BBB   AAAAAAAAAAAAAAA           SSS  RRR   RRR             TTT        LLL
BBB          BBB   AAAAAAAAAAAAAAA           SSS  RRR   RRR             TTT        LLL
BBB          BBB   AAAAAAAAAAAAAAA           SSS  RRR   RRR             TTT        LLL
BBB          BBB   AAA       AAA           SSS  RRR      RRR           TTT        LLL
BBB          BBB   AAAAAAAAAAAAAAA           SSS  RRR   RRR             TTT        LLL
BBB          BBB   AAA       AAA           SSS  RRR      RRR           TTT        LLL
BBB          BBB   AAA       AAA           SSS  RRR      RRR           TTT        LLL
BBB          BBB   AAA       AAA           SSS  RRR      RRR           TTT        LLL
BBBBBBBBBBBB       AAA       AAA   SSSSSSSSSSS   RRR         RRR       TTT        LLLLLLLLLLLLLLL
BBBBBBBBBBBB       AAA       AAA   SSSSSSSSSSS   RRR         RRR       TTT        LLLLLLLLLLLLLLL
BBBBBBBBBBBB       AAA       AAA   SSSSSSSSSSS   RRR         RRR       TTT        LLLLLLLLLLLLLLL
```

FILEID**BPAXRBDEF

```
BBBBBBBB    PPPPPPPP      AAAAAA    XX      XX  RRRRRRRR    BBBBBBBB    DDDDDDDD    EEEEEEEEEE  FFFFFFFFFF
BBBBBBBB    PPPPPPPP      AAAAAA    XX      XX  RRRRRRRR    BBBBBBBB    DDDDDDDD    EEEEEEEEEE  FFFFFFFFFF
BB      BB  PP      PP   AA    AA   XX      XX  RR      RR  BB      BB  DD      DD  EE          FF
BB      BB  PP      PP   AA    AA   XX      XX  RR      RR  BB      BB  DD      DD  EE          FF
BB      BB  PP      PP   AA    AA     XX  XX    RR      RR  BB      BB  DD      DD  EE          FF
BB      BB  PP      PP   AA    AA     XX  XX    RR      RR  BB      BB  DD      DD  EE          FF
BBBBBBBB    PPPPPPPP     AA    AA       XX      RRRRRRRR    BBBBBBBB    DD      DD  EEEEEEEE    FFFFFFFF
BBBBBBBB    PPPPPPPP     AA    AA       XX      RRRRRRRR    BBBBBBBB    DD      DD  EEEEEEEE    FFFFFFFF
BB      BB  PP           AAAAAAAAAA     XX  XX  RR  RR      BB      BB  DD      DD  EE          FF
BB      BB  PP           AAAAAAAAAA     XX  XX  RR  RR      BB      BB  DD      DD  EE          FF
BB      BB  PP           AA    AA   XX      XX  RR    RR    BB      BB  DD      DD  EE          FF
BB      BB  PP           AA    AA   XX      XX  RR    RR    BB      BB  DD      DD  EE          FF
BBBBBBBB    PP           AA    AA   XX      XX  RR      RR  BBBBBBBB    DDDDDDDD    EEEEEEEEEE  FF
BBBBBBBB    PP           AA    AA   XX      XX  RR      RR  BBBBBBBB    DDDDDDDD    EEEEEEEEEE  FF
```

```
RRRRRRRR    EEEEEEEEEE    QQQQQQ
RRRRRRRR    EEEEEEEEEE    QQQQQQ
RR      RR  EE          QQ      QQ
RR      RR  EE          QQ      QQ
RR      RR  EE          QQ      QQ
RR      RR  EE          QQ      QQ
RRRRRRRR    EEEEEEEE    QQ      QQ
RRRRRRRR    EEEEEEEE    QQ      QQ
RR  RR      EE          QQ  QQ  QQ
RR  RR      EE          QQ  QQ  QQ
RR    RR    EE          QQ    QQ
RR    RR    EE          QQ    QQ
RR      RR  EEEEEEEEEE    QQQQ  QQ
RR      RR  EEEEEEEEEE    QQQQ  QQ
```

```
!+
! This file, BPAXRBDEF.REQ, defines the XRB.
!-

!
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!++
! AUTHOR: Jeremy Barker, CREATION DATE: 06-Jan-79
!
! MODIFIED BY:
!
!       VERSION X01
!
!       Jeremy Barker, 13-Mar-79
! 014   - Add fields used by .POSTN call
!
!       Jeremy Barker, 10-Apr-79
! 143   - Define xrb$w_timeout as signed
!
!       Jim Ibbett, 26-Apr-79
! 200   - Add bitfields for flagword 2 for logical name support
!
!       Jeremy Barker, 24-May-79
! 219   - Define fields used by .SPEC call
!
!       Jim Ibbett, 5-Jun-79
! 227   - add bit definitions for ronly mode
!
!       Jim Ibbett, 28-Jun-79
! 270   - add bit definitions for flagword 2 bit 11
!
!       Jeremy Barker, 02-Jul-79
! 264   - define .POSTN return fields as WORD, not BYTE
```

```
!       Viveka Eriksson, 07-Sept-79
! 317   - Define fields used by .PEEK call
! 1-318 - Change name to BPAXRBDEF.REQ and remove defense against redundent
!         requires of this file.  JBS
! 1-319 - Add copyright notice.  SBL 11-Mar-1980
!--

!
! xrb definition
!

FIELD xrb$fields =
    SET
    xrb$w_buflen    = [ 0, W_ ],        ! buffer length
    xrb$w_linesize  = [ 0, W_ ],        ! line length + 1 for .POSTN    ! M 264
    xrb$w_spec_fun  = [ 0, W_ ],        ! function code for .SPEC       ! A 219
    xrb$w_peek_arg  = [ 0, W_ ],        ! Peek argument                 ! A 317
    xrb$w_time_1    = [ 2, W_ ],        ! Sytem time part I for .PEEK   ! A 317
    xrb$w_bytcnt    = [ 2, W_ ],        ! byte count
    xrb$w_carrposn  = [ 2, W_ ],        ! carriage position for .POSTN  ! M 264
    xrb$w_mt_param  = [ 2, SW_ ],       ! magtape .SPEC parameter       ! A 219
    xrb$w_mt_value  = [ 2, W_ ],        ! magtape .SPEC result value    ! A 219
    xrb$w_time_2    = [ 4, W_ ],        ! System time part II for .PEEK ! A 317
    xrb$w_bufadr    = [ 4, W_ ],        ! buffer address
    xrb$b_channel   = [ 6, B_ ],        ! BASIC channel number * 2
    xrb$v_channel   = [ 6, V_(1,7) ],   ! BASIC channel number          ! A 219
    xrb$b_blkhi     = [ 7, B_ ],        ! MSB of block number
    xrb$b_hndindx   = [ 7, B_ ],        ! handler index for .SPEC       ! A 219
    xrb$w_blklo     = [ 8, W_ ],        ! LSB of block number
    xrb$w_flag2     = [ 8, W_ ],        ! Flagword 2 for .FSS
    xrb$v_name_seen = [ 8, V_(0) ],     ! Flagword 2 bitfield definitions
    xrb$v_dot_seen  = [ 8, V_(3) ],     ! ...
    xrb$v_ext_seen  = [ 8, V_(4) ],     ! ...
    xrb$v_ppn_seen  = [ 8, V_(7) ],     ! ...
    xrb$v_prot_seen = [ 8, V_(10) ],    ! ...
    xrb$v_def_prot  = [ 8, V_(11) ],    ! ...                           ! A270
    xrb$v_coln_seen = [ 8, V_(12) ],    ! ...
    xrb$v_dev_seen  = [ 8, V_(13) ],    ! ...
    xrb$v_log_name  = [ 8, V_(14) ],    ! ...                           ! A 200
    xrb$v_log_notr  = [ 8, V_(15) ],    ! ...                           ! A 200
    xrb$w_timeout   = [ 10, SW_ ],      ! terminal input timeout        ! M 143
    xrb$w_flag1     = [ 10, W_ ],       ! Flagword 1 for .FSS
    xrb$v_cl_seen   = [ 10, V_(0) ],    ! Flagword 1 bitfield definitions
    xrb$v_moro_seen = [ 10, V_(1) ],    ! ...
    xrb$v_fisi_seen = [ 10, V_(2) ],    ! ...
    xrb$v_pos_seen  = [ 10, V_(3) ],    ! ...
    xrb$v_mo_ronly  = [ 10, V_(7) ],    ! ...                           ! A227
    xrb$v_name_1    = [ 10, V_(8) ],    ! ...
    xrb$v_dot_1     = [ 10, V_(9) ],    ! ...
    xrb$v_ppn_1     = [ 10, V_(10) ],   ! ...
    xrb$v_prot_1    = [ 10, V_(11) ],   ! ...
    xrb$v_coln_1    = [ 10, V_(12) ],   ! ...
    xrb$v_log_1     = [ 10, V_(13) ],   ! ...                           ! A 200
    xrb$v_nfrep     = [ 10, V_(14) ],   ! ...                           ! A 200
    xrb$w_opmod     = [ 12, W_ ]        ! operation modifier
```

```
    TES;

LITERAL
    xrb$m_name_seen = M_(0),        ! Flagword 2 bitmask definitions
    xrb$m_dot_seen  = M_(3),        ! ...
    xrb$m_ext_seen  = M_(4),        ! ...
    xrb$m_ppn_seen  = M_(7),        ! ...
    xrb$m_prot_seen = M_(10),       ! ...
    xrb$m_def_prot  = M_(11),       ! ...                           ! A270
    xrb$m_coln_seen = M_(12),       ! ...
    xrb$m_dev_seen  = M_(13),       ! ...
    xrb$m_log_name  = M_(14),       ! ...                           ! A 200
    xrb$m_log_notr  = M_(15),       ! ...                           ! A 200
    xrb$m_cl_seen   = M_(0),        ! Flagword 1 bitmask definitions
    xrb$m_moro_seen = M_(1),        ! ...
    xrb$m_fisi_seen = M_(2),        ! ...
    xrb$m_pos_seen  = M_(3),        ! ...
    xrb$m_mo_ronly  = M_(7),        ! ...                           ! A227
    xrb$m_name_1    = M_(8),        ! ...
    xrb$m_dot_1     = M_(9),        ! ...
    xrb$m_ppn_1     = M_(10),       ! ...
    xrb$m_prot_1    = M_(11),       ! ...
    xrb$m_coln_1    = M_(12),       ! ...
    xrb$m_log_1     = M_(13),       ! ...                           ! A 200
    xrb$m_nfrep     = M_(14),       ! ...                           ! A 200
    xrb$k_length    = 14;           ! Length of xrb in bytes

MACRO
    $xrb_def = BLOCK[xrb$k_length, BYTE] FIELD(xrb$fields) % ;
!
! End of file BPAXRBDEF.REQ
```